MONTANA DEPARTMENT OF TRANPSPORTATION Helena, Montana 59620-1001

MEMORANDUM

To: Craig Abernathy/Pavement Analysis & Research Section

Robert E. Burkhardt/FHWA (Absent) Kent M. Barnes, P.E./Materials Bureau

John D. Craig/Transportation Planning Division

Jim Greil/Aeronautics Division (Absent)

Dennis A. Hult/Motor Carrier Services Division

James E. Hyatt/Maintenance Division

Joel M. Marshik, P.E./Environmental Services (Absent) Jeanne Nydegger/Pavement Analysis & Research Section Brooke Page/Pavement Analysis & Research Section

Stefan Streeter, P.E./Billings District

James A. Walther, P.E./Highways & Engineering Division (Absent)

From: Susan C. Sillick

Manager, Research Program

Date: June 20, 2000

Subject: Summary of Minutes from Tuesday, May 30, 2000 RRC Meeting

Sue Sillick, Research Unit Manager chaired the meeting in the absence of Jim Walther.

1. **Budget Report:** Attached – no additions

2. **Research Project – current listing:** Attached

2a. Rollover Crashes – Attached

Pierre Jomini was present to discuss progress on this project. He discussed the extent of rollover crashes in Montana and results of the Technical Panel's literature search. The Panel believes some items can be implemented directly without additional research. These items fall into the categories of driver education, roadway and vehicle design, environment, and maintenance/road construction.

The Panel feels research needs exist in two areas. The first area is a pooled-fund study on run-off-road injuries and fatalities. Pierre had previously requested and received approval-in-concept from the RRC for participation in this pooled-fund study.

The second area is a research project designed to evaluate shoulder rumble strips on the Interstate and 2-lane two-way rural roads in Montana. The Panel would like to issue an RFP for this second research area and is requesting RRC approval-in-concept before they proceed.

Using a hand vote, the RRC members present voted unanimously for the technical panel to proceed with the RFP.

2b. Physical and Mechanical Properties of High-Performance Concrete Produced in Montana

Kent Barnes explained to the RRC that this project had been started at MSU in 1998, but was cancelled, prior to completion, when the Principal Investigator moved.

This project was started because it is believed that high performance concrete (HPC) will reduce chloride ion penetration and lengthen bridge deck life—the limiting factor to deck life in Montana.

Recently a HPC technical panel was re-formed. This Panel is planning on issuing an RFP to complete the original scope of work, which has support from both the Bridge Bureau and Materials Bureau, but would like to have an approval-in-concept from the RRC before proceeding. All RRC members present, voting by a show of hands, voted unanimously in favor of the concept.

3. **Reports:**

3a. Behavior of Steel Pipe Pile-to-Concrete Pile Cap Connections Under Lateral Loads – Quarterly Progress Report 1/1/00 to 3/31/00 – Attached

3b. Evaluation of Geosynthetic Reinforced Flexible Pavement Systems Using Two Pavement Tests – Quarterly Progress Report 1/1/00 to 3/31/00 – Attached

4. Contract Extensions:

4a. Sodium Chloride use in Maintenance Sand Stockpiles & Storage of Stockpiled Sanding Materials – Attached

Dan Williams distributed copies of the draft report prepared by MAXIM. Dan discussed some of the lab results and explained the project has a \$13,000.00 overrun due to additional testing that we requested and an underestimation of required data analysis.

The Technical Panel is requesting the RRC cover the overrun.

Upon a motion from Jim Hyatt, seconded by Kent Barnes, the RRC voted unanimously to add \$13,000.00 to this project

Also, the warm winter we had prevented some of the field analyses. Therefore, the Technical Panel may be interested in continuing this project for another winter to allow for additional testing. The Panel may submit a proposal for continuation of this project to the RRC at a later date.

5. Proposals:

5a. Computer-Based, Self-Operating Training System on Anti-Icing/Roads Weather Information Systems (AI/RWIS) – Pooled-Fund Study – Attached

Jim Hyatt addressed the RRC on behalf of the Maintenance Division, which supports this pooled-fund study.

The Winter Maintenance Policy Coordinating Committee (WMPCC) of AASHTO, of which John Blacker, MDT Maintenance Administrator is a member, is soliciting for funds to support a pooled-fund study that will develop an RWIS computer-based training package (\$30,000.00 per participant).

After a discussion, John Craig made a motion to participate in this study at the level of \$30,000.00. Dennis Hult seconded the motion. All members present voted in favor of the motion.

5b. Bulk Specific Gravity Round Robin Using the Corelok Vacuum Sealing Device – Pooled-Fund Study – Attached

Kent Barnes told the RRC that the Materials Bureau supports this project, which will cost \$10,000.00. Each participant will receive a Corelok Vacuum Sealing Device. The Materials Bureau was looking into purchasing this device to investigate this technology. However, the investigation can be done more efficiently through a pooled-fund study.

Jim Hyatt made a motion to participate in this pooled-fund study. Stefan Streeter seconded the motion. All present voted in favor of the motion.

5c. Literature Availability Assessment for Relevant Interactions Between Highways, Wildlife, and Fisheries in Montana – Attached

Dr. Lynn Irby-MSU, Kevin Podruzny-MSU and Mark Traxler-Environmental Services were present to discuss the proposal (supported by the Technical Panel) and answer questions.

The purpose of this project is to develop a database to unify available literature and research-in-progress data.

Jim Hyatt made a to motion that fund this MPART small project. Dennis Hult seconded the motion, which passed unanimously.

6. Implementation: None

cc: Bruce D. Barrett/Billings District

D. John Blacker/Maintenance Division

Russell McDonald/Human Resources Division

Loran Frazier, P.E./Missoula District

Michael D. Ferguson/Aeronautics Division

Jason Giard, P.E./Butte District

Gary A. Gilmore, P.E./Engineering Division

Michael P. Johnson/Great Falls District

Joseph P. Kolman, P.E./Bridge Bureau

Drew F. Livesay/Motor Carrier Services Division

Thomas E. Martin, P.E./Right-of-Way Bureau

William L. McChesney/Glendive District

Carl S. Peil, P.E./Preconstruction Bureau

Patricia Saindon/Transportation Planning Division

William G. Salisbury/Administration Division

Robert D. Tholt, P.E./Construction Bureau

Jon S. Watson, P.E./Pavement Analysis and Research Section

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